S
0.864
3a
978

ANALYSIS OF CONTRACTS AWARDED
CALENDAR YEAR 1978

STATE DOCUMENTS COLLECTION
JAN [illegible]
MONTANA STATE LIBRARY
930 E Lyndale Ave.
Helena, Montana 59601

PLEASE RETURN

PREPARED BY THE

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

IN COOPERATION WITH THE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Montana State Library
3 0864 1003 9830 7

ANALYSIS OF CONTRACTS AWARDED

CALENDAR YEAR 1978

FOREWARD

Analysis of Contracts Awarded is a study of highway contract letting statistics. It classifies roadway highway projects in tables showing costs, mileage, and types of construction arranged in categories of financial district, surface type, rural and urban status, and number of lanes. The material has been prepared from the detailed estimates and contract award sheets for all roadway contracts awarded during the calendar year. A brief explanation of each of the following tables is provided to help in the interpretation of the figures and to lessen the possibility of erroneous conclusions.

TABLE 1 - SUMMARY OF NEW AND RECONSTRUCTED ROADWAY ONLY, BY COUNTY AND FINANCIAL DISTRICT.

This table is intended to inform the user of how many actual miles of roadway were let to contract and the costs involved. It includes all items pertinent to the same section of roadway except structures.

TABLE 1A - SUMMARY OF TOTAL AMOUNTS AWARDED BY COUNTY AND FINANCIAL DISTRICT.

This table is a total of all miles and costs involved regardless of the type of project. Besides roadway costs, it includes signing, lighting, fencing and bridge projects.

TABLE 2 - SUMMARY OF ROADWAY MILEAGE AWARDED BY SYSTEMS.

The table involves the same type of construction as Table 1. Table 2, however, provides a cost per mile figure for the different systems.

TABLE 3-3B-3C-3D - SUMMARY OF TYPE OF CONSTRUCTION.

A separate table has been prepared for each Federal Aid System with all projects classified into 17 different categories. The purpose of this table is to give a general indication of what type of construction is responsible for the major share of monies spent. For example, note the bulk of interstate monies spent for new construction, whereas, the greater share for the primary and secondary is spent for reconstruction.

TABLE 4-4A-4B-4C-4D - SUMMARY OF SURFACE TYPE BY SYSTEMS.

These tables indicate the average cost per mile of various items included in a completed roadway by type of surfacing. Caution should be exercised in using the average cost per mile data due to the small sample involved for some cost items. Any cost figure appearing under stage construction bridges in informational only. Bridge stage construction costs are not reflected in the cost per mile or cost per square foot of structures in this table.

Digitized by the Internet Archive
in 2010 with funding from
Montana State Library

http://www.archive.org/details/analysisofcontra1978mont

TABLE 5 - SUMMARY OF ROADWAY MILEAGE AWARDED BY NUMBER OF TRAFFIC LANES.

This table deals with the same miles and costs involved in Tables 1 and 2, except off system projects are not included.

TABLE 6-6A-6B-6C-6D - SUMMARY OF STRUCTURES BY TYPE.

These tables summarize the number of structures let by type and also provide a cost per square foot, by type of structure.

TABLE 7 - SUMMARY OF CONSTRUCTED AND NON-CONTRACTED COSTS BY SYSTEM.

The non-contracted figure reflects construction engineering costs only. Contingency items such as flagging, roadway materials, training, etc., supplied by the State, are reflected in the contracted cost.

ew/6V

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF ROADWAY MILEAGE AWARDED
BY COUNTY AND FINANCIAL DISTRICT
DURING CALENDAR YEAR 1978

THIS TABLE SUMMARIZES ONLY NEW OR RECONSTRUCTED ROADWAY. REFER TO TABLE 1A FOR THE TOTAL AMOUNTS OF CONTRACTS AWARDED

OCTOBER 26, 1979

TABLE 1

COUNTY AND FINANCIAL DISTRICT	INTERSTATE SYSTEM MILES	INTERSTATE SYSTEM COST	PRIMARY SYSTEM MILES	PRIMARY SYSTEM COST	URBAN EXTENSION MILES	URBAN EXTENSION COST	SECONDARY SYSTEM MILES	SECONDARY SYSTEM COST	F.A. URBAN MILES	F.A. URBAN COST	OTHER SYSTEMS MILES	OTHER SYSTEMS COST	ALL SYSTEMS MILES	ALL SYSTEMS COST
LINCOLN							1.084	397,690					1.084	397,690
FD #01							1.084	397,690					1.084	397,690
GLACIER							5.296	1,400,744					5.296	1,400,744
FD #02							5.296	1,400,744					5.296	1,400,744
ROOSEVELT			6.247	1,594,914									6.247	1,594,914
VALLEY			3.959	2,506,709									3.959	2,506,709
FD #03			10.206	4,101,623									10.206	4,101,623
WIBAUX											2.200	131,255	2.200	131,255
FD #04											2.200	131,255	2.200	131,255
PETROLEUM			6.681	1,754,797									6.681	1,754,797
FD #05			6.681	1,754,797									6.681	1,754,797
CHOUTEAU							4.347	1,039,964					4.347	1,039,964
FD #06							4.347	1,039,964					4.347	1,039,964
MINERAL	5.017	7,487,635											5.017	7,487,635
MISSOULA							.762	1,221,248	.251	348,474			1.013	1,569,722
FD #08	5.017	7,487,635					.762	1,221,248	.251	348.474			6.030	9,057,357
BEAVERHEAD	12.554	5,808,420											12.554	5,808,420
DEER LODGE					1.200	996,162							1.200	996,162
FD #09	12.554	5,808,420			1.200	996,162							13.754	6,804,582
PARK									.385	202,557			.385	202,557
FD #10									.385	202,557			.385	202,557
BIG HORN							11.231	2,419,871					11.231	2,419,871
CARBON							4.420	1,160,337					4.420	1,160,337
TREASURE							.326	88,747					.326	88,747
YELLOWSTONE					.200	197,427							.200	197,427
FD #11					.200	197,427	15.977	3,668,955					16.177	3,866,382
ROSEBUD			6.717	2,399,600									6.717	2,399,600
FD #12			6.717	2,399,600									6.717	2,399,600

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF ROADWAY MILEAGE AWARDED
BY COUNTY AND FINANCIAL DISTRICT
DURING CALENDAR YEAR 1978

THIS TABLE SUMMARIZES ONLY NEW OR RECONSTRUCTED ROADWAY. REFER TO TABLE 1A FOR THE TOTAL AMOUNTS OF CONTRACTS AWARDED

OCTOBER 26, 1979

TABLE 1

COUNTY AND	INTERSTATE SYSTEM		PRIMARY SYSTEM		URBAN EXTENSION		SECUNDARY SYSTEM		F.A. URBAN		OTHER SYSTEMS		ALL SYSTEMS	
FINANCIAL DISTRICT	MILES	COST	MILES	COST	MILES	COST	MILES	COST	MILES	COST	MILES	COST	MILES	COST
TOTAL	17.571	13,296,055	23.604	8,256,020	1.400	1,193,589	27.466	7,728,601	.636	551,031	2.200	131,255	72.877	31,156,551

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU
SUMMARY OF TOTAL AMOUNTS AWARDED
BY COUNTY AND FINANCIAL DISTRICT
DURING CALENDAR YEAR 1978
TABLE 1A

OCTOBER 26, 1979

COUNTY AND FINANCIAL DISTRICT	INTERSTATE SYSTEM MILES	INTERSTATE SYSTEM COST	PRIMARY SYSTEM MILES	PRIMARY SYSTEM COST	URBAN EXTENSION MILES	URBAN EXTENSION COST	SECONDARY SYSTEM MILES	SECONDARY SYSTEM COST	F.A. URBAN MILES	F.A. URBAN COST	OTHER SYSTEMS MILES	OTHER SYSTEMS COST	ALL SYSTEMS MILES	ALL SYSTEMS COST
FLATHEAD				497,621				8,870		111.503				617,994
LAKE			12.600	1,115,046				13,986					12.600	1,129,032
LINCOLN				56,003			1.084	397,690					1.084	453,693
FD #01			12.600	1,668,670			1.084	420,546		111.503			13.684	2,200,719
BLAINE								6,194						6,194
GLACIER				5,788			5.296	1,403,841					5.296	1,409,629
HILL						27,396		1,742		28,784				57,922
LIBERTY								1,355						1,355
TOOLE				5,402				2,516						7,918
FD #02				11,190		27,396	5.296	1,415,648		28,784			5.296	1,483,018
DANIELS								7,202						7,202
PHILLIPS				6,924				3,001						9,925
ROOSEVELT			6.247	2,529,649				7,502					6.247	2,537,151
SHERIDAN								5,102						5,102
VALLEY			6.297	3,312,615				17,401					6.297	3,330,016
FD #03			12.544	5,849,188				40,208					12.544	5,889,396
DAWSON		1,429,389		4,898				5,922		9,151				1,449,360
MC CONE				5,613				538						6,151
PRAIRIE								4,576						4,576
RICHLAND				17,344				300						17,644
WIBAUX											2.200	131,255	2.200	131,255
FD #04		1,429,389		27,855				11.336		9.151	2.200	131,255	2.200	1,608,986
FERGUS			8.720	511,147			.001	92,152		30,719			8.721	634,018
PETROLEUM			6.681	1,754,797									6.681	1,754,797
FD #05			15.401	2,265,944			.001	92,152		30,719			15.402	2,388,815
CASCADE	13.773	3,435,635						17,743		5,427,098			13.773	8,880,476
CHOUTEAU							4.347	1,136,208					4.347	1,136,208
JUDITH BASIN								3,541						3,541
PONDERA		14,888						6,286						21,174
TETON		7,445		1,043				5,216						13,704
FD #06	13.773	3,457,968		1,043			4.347	1,168,994		5,427,098			18.120	10,055,103
BROADWATER		1,217,443												1,217,443
JEFFERSON		4,210,218						8,399						4,218,617
LEWIS & CLARK		8,208		42,836		38,468		1,482		165,145		22,948		279,087
FD #07		5,435,869		42,836		38,468		9,881		165,145		22,948		5,715,147
GRANITE		77,868		4,354										82,222
MINERAL	8.956	14,525,081						1,451					8.956	14,526,532

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU
SUMMARY OF TOTAL AMOUNTS AWARDED
BY COUNTY AND FINANCIAL DISTRICT
DURING CALENDAR YEAR 1978
TABLE 1A

OCTOBER 26, 1979

COUNTY AND FINANCIAL DISTRICT	INTERSTATE SYSTEM		PRIMARY SYSTEM		URBAN EXTENSION		SECONDARY SYSTEM		F.A. URBAN		OTHER SYSTEMS		ALL SYSTEMS	
	MILES	COST	MILES	COST	MILES	COST	MILES	COST	MILES	COST	MILES	COST	MILES	COST
MISSOULA			32.534	2,083,124	.700	546,783	.762	1,231,408	.251	630,874			34.247	4,492,189
POWELL			7.757	807,264				9,538					7.757	816,802
RAVALLI				373,069				6,773						379,842
SANDERS				604				5,160						5,764
FD #08	8.956	14,602,949	40.291	3,268,415	.700	546,783	.762	1,254,330	.251	630,874			50.960	20,303,351
BEAVERHEAD	12.554	6,742,911										988	12.554	6,743,899
DEER LODGE					1.200	996,162				4,446		3,458	1.200	1,004,066
MADISON		23,235		728,116				7,905						759,256
SILVER BOW				2,470		31,679				13,833				47,982
FD #09	12.554	6,766,146		730,586	1.200	1,027,841		7,905		18,279		4,446	13.754	8,555,203
GALLATIN		447,831		2,470		54,008		14,467						518,776
MEAGHER								7,082						7,082
PARK		14,883		3,459		7,177			.385	210,105			.385	235,624
SWEET GRASS		16,828												16,828
WHEATLAND								1,181						1,181
FD #10		479,542		5,929		61,185		22,730	.385	210,105			.385	779,491
BIG HORN		713					11.231	2,425,157					11.231	2,425,870
CARBON							4.420	1,160,337					4.420	1,160,337
GOLDEN VALLEY								2,360						2,360
MUSSELSHELL								1,181						1,181
STILLWATER	19.249	1,266,107						1.838					19.249	1,267,945
TREASURE		38,004					.326	90,209					.326	128,213
YELLOWSTONE	2.810	239,975		20,118	.200	197,427		3,651		102,057		182,727	3.010	745,955
FD #11	22.059	1,544,799		20,118	.200	197,427	15.977	3,684,733		102,057		182,727	38.236	5,731,861
CARTER			20.397	1,589,253									20.397	1,589,253
CUSTER						34,882				7,599				42,481
FALLON				5,821										5,821
POWDER RIVER								10,577						10,577
ROSEBUD		306,360	16.439	3,570,387				4,463					16.439	3,881,210
FD #12		306,360	36.836	5,165,461		34,882		15,040		7,599			36.836	5,529,342
TOTAL	57.342	34,023,022	117.672	19,057,235	2.100	1,933,982	27.467	8,143,503	.636	6,741,314	2.200	341,376	207.417	70,240,432

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF ROADWAY MILEAGE AWARDED BY SYSTEMS
DURING CALENDAR YEAR 1978

THIS TABLE SUMMARIZES ONLY NEW OR RECONSTRUCTED ROADWAYS

TABLE 2

OCTOBER 26, 1979

SYSTEM	MILEAGE	TOTAL COST	COST PER MILE
RURAL			
INTERSTATE RURAL	17.571	13,296,055	756,704
PRIMARY RURAL	23.604	8,256,020	349,772
SECONDARY RURAL	27.466	7,728,601	281,387
OTHER	2.200	131,255	59,661
SUBTOTAL RURAL	70.841	29,411,931	415,182
URBAN			
INTERSTATE URBAN			
URBAN EXTENSION	1.400	1,193,589	852,563
FA URBAN	.636	551,031	866,400
OTHER			
SUBTOTAL URBAN	2.036	1,744,620	856,886
GRAND TOTAL	72.877	31,156,551	427,522

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION DURING CALENDAR YEAR 1978 BY SYSTEM

TABLE 3

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	INTERSTATE	
	MILES	COST
RURAL		
NEW CONSTRUCTION	5.017	7,487,635
RECONSTRUCTION		
ADD TWO LANES	12.554	5,808,420
MAJOR STRUCTURES		5,621,387
RESURFACE	15.985	4,979,048
STAGE CONSTRUCTION, ROADWAY	23.786	6,621,799
TRAFFIC CONTROL		77,868
REST AREA		
WIDENING ROADWAY		
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		417,891
LANDSCAPING		183,478
FENCING		
PMS OVERLAY AND SEAL & COVER		2,646,832
WEIGH STN & SCENIC OVERLOOK		
OTHER		38,004
BRIDGE REPAIR		140,660
TOTAL		34,023,022

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION DURING CALENDAR YEAR 1978 BY SYSTEM

TABLE 3

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	INTERSTATE	
	MILES	COST
ALL CONSTRUCTION		
NEW CONSTRUCTION	5.017	7,487,635
RECONSTRUCTION		
ADD TWO LANES	12.554	5,808,420
MAJOR STRUCTURES		5,621,387
RESURFACE	15.985	4,979,048
STAGE CONSTRUCTION, ROADWAY	23.786	6,621,799
TRAFFIC CONTROL		77,868
REST AREA		
WIDENING ROADWAY		
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		417,891
LANDSCAPING		183,478
FENCING		
PMS OVERLAY AND SEAL & COVER		2,646,832
WEIGH STN & SCENIC OVERLOOK		
OTHER		38,004
BRIDGE REPAIR		140,660
TOTAL		34,023,022

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION DURING CALENDAR YEAR 1978
BY SYSTEM
TABLE 3A

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	PRIMARY RURAL	
	MILES	COST
RURAL		
NEW CONSTRUCTION		
RECONSTRUCTION	23.604	8,256,020
ADD TWO LANES		
MAJOR STRUCTURES		625,161
RESURFACE	84.011	6,456,052
STAGE CONSTRUCTION, ROADWAY	.008	112,229
TRAFFIC CONTROL		443,544
REST AREA		
WIDENING ROADWAY		
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		550,300
LANDSCAPING		31,677
FENCING		
PMS OVERLAY AND SEAL & COVER		2,046,526
WEIGH STN & SCENIC OVERLOOK		
OTHER		459,486
BRIDGE REPAIR		76,240
TOTAL		19,057,235

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION
DURING CALENDAR YEAR 1978
BY SYSTEM
TABLE 3B

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	URBAN EXTENSION MILES	URBAN EXTENSION COST
URBAN		
NEW CONSTRUCTION		
RECONSTRUCTION	1.400	1,193,589
ADD TWO LANES		
MAJOR STRUCTURES		
RESURFACE		
STAGE CONSTRUCTION, ROADWAY		
TRAFFIC CONTROL		319,132
REST AREA		
WIDENING ROADWAY	.700	415,286
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		5,975
LANDSCAPING		
FENCING		
PMS OVERLAY AND SEAL & COVER		
WEIGH STN & SCENIC OVERLOOK		
OTHER		
BRIDGE REPAIR		
TOTAL		1,933,982

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION DURING CALENDAR YEAR 1978 BY SYSTEM

TABLE 3C

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	SECONDARY RURAL	
	MILES	COST
RURAL		
NEW CONSTRUCTION	.762	1,221,248
RECONSTRUCTION	26.705	6,591,636
ADD TWO LANES		
MAJOR STRUCTURES		
RESURFACE		
STAGE CONSTRUCTION, ROADWAY		
TRAFFIC CONTROL		46,788
REST AREA		
WIDENING ROADWAY		
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		190,448
LANDSCAPING		
FENCING		
PMS OVERLAY AND SEAL & COVER		
WEIGH STN & SCENIC OVERLOOK		
OTHER		93,383
BRIDGE REPAIR		
TOTAL		8,143,503

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION DURING CALENDAR YEAR 1978 BY SYSTEM

TABLE 3D

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	F.A. URBAN	
	MILES	COST
URBAN		
NEW CONSTRUCTION------------------------------	.251	348,474
RECONSTRUCTION--------------------------------	.385	202,557
ADD TWO LANES---------------------------------		
MAJOR STRUCTURES------------------------------		5,193,129
RESURFACE-------------------------------------		
STAGE CONSTRUCTION, ROADWAY-------------------		
TRAFFIC CONTROL-------------------------------		735,136
REST AREA-------------------------------------		
WIDENING ROADWAY------------------------------		
STAGE CONSTRUCTION, MAJOR STRUCTURES----------		
SAFETY--		262,018
LANDSCAPING-----------------------------------		
FENCING---------------------------------------		
PMS OVERLAY AND SEAL & COVER------------------		
WEIGH STN & SCENIC OVERLOOK-------------------		
OTHER---		
BRIDGE REPAIR---------------------------------		
TOTAL		6,741,314

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION
DURING CALENDAR YEAR 1978
BY SYSTEM
TABLE 3E

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	OTHER	
	MILES	COST
RURAL		
NEW CONSTRUCTION		
RECONSTRUCTION	2.200	131,255
ADD TWO LANES		
MAJOR STRUCTURES		
RESURFACE		
STAGE CONSTRUCTION, ROADWAY		
TRAFFIC CONTROL		22,948
REST AREA		
WIDENING ROADWAY		
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		4,446
LANDSCAPING		
FENCING		
PMS OVERLAY AND SEAL & COVER		
WEIGH STN & SCENIC OVERLOOK		
OTHER		
BRIDGE REPAIR		
TOTAL		158,649

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION DURING CALENDAR YEAR 1978 BY SYSTEM

TABLE 3E

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	OTHER	
	MILES	COST
URBAN		
NEW CONSTRUCTION		
RECONSTRUCTION		
ADD TWO LANES		
MAJOR STRUCTURES		
RESURFACE		
STAGE CONSTRUCTION, ROADWAY		
TRAFFIC CONTROL		
REST AREA		
WIDENING ROADWAY		
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		182,727
LANDSCAPING		
FENCING		
PMS OVERLAY AND SEAL & COVER		
WEIGH STN & SCENIC OVERLOOK		
OTHER		
BRIDGE REPAIR		
TOTAL		182,727

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF TYPE OF CONSTRUCTION DURING CALENDAR YEAR 1978 BY SYSTEM

TABLE 3E

OCTOBER 26, 1979

TYPE OF CONSTRUCTION	OTHER	
	MILES	COST
ALL CONSTRUCTION		
NEW CONSTRUCTION		
RECONSTRUCTION	2.200	131,255
ADD TWO LANES		
MAJOR STRUCTURES		
RESURFACE		
STAGE CONSTRUCTION, ROADWAY		
TRAFFIC CONTROL		22,948
REST AREA		
WIDENING ROADWAY		
STAGE CONSTRUCTION, MAJOR STRUCTURES		
SAFETY		187,173
LANDSCAPING		
FENCING		
PMS OVERLAY AND SEAL & COVER		
WEIGH STN & SCENIC OVERLOOK		
OTHER		
BRIDGE REPAIR		
TOTAL		341,376

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY BY SURFACE TYPE
DURING CALENDAR YEAR 1978
TABLE 4 INTERSTATE SYSTEM OCTOBER 26, 1979

COST ITEM		STAGE CONSTR. (GRAVEL)	SURFACE TYPE		MISC. ITEMS
			BITUM. MIX	CONCRETE	
GRADING	MILES	.050	31.810		
	COST	58,874	7,553,007		116,939
	COST/MILE	1,177,480	237,441		
DRAINAGE	MILES	.050	31.810	3.423	
	COST	3,414	653,506	504	136,429
	COST/MILE	68,280	20,544	147	
FOUNDATION	MILES		47.795	3.423	
	COST		2,192,203	109,472	11,373
	COST/MILE		45,866	31,981	
SURFACING	MILES		53.869	3.423	
	COST		11,743,068	1,343,358	46,600
	COST/MILE		217,993	392,450	
RDSIDE DEVEL.	MILES		5.017		
	COST		13,372		
	COST/MILE		2,665		
EROSION CTL.	MILES	.050	37.884	3.423	
	COST	35,970	1,013,048	6,947	156,544
	COST/MILE	719,400	26,740	2,029	
TRAFFIC CTL.	MILES	.050	53.869	3.423	
	COST	1,500	1,330,441	101,341	349,036
	COST/MILE	30,000	24,697	29,605	
FENCING	MILES	.050	31.344		
	COST	2,550	142,309		1,480
	COST/MILE	51,000	4,540		
MISC.	MILES	.050	53.869	3.423	
	COST	950	1,137,900	100,000	39,500
	COST/MILE	19,000	21,123	29,214	
BRIDGES	SQ. FEET				104,686
	COST				5,621,387
	COST/SQ. FOOT				53.697
ALL ITEMS	MILES	.050	53.869	3.423	
	COST	103,258	25,778,854	1,661,622	6,479,288
	COST/MILE	2,065,160	478,547	485,428	

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY BY SURFACE TYPE
DURING CALENDAR YEAR 1978

TABLE 4A PRIMARY SYSTEM OCTOBER 26, 1979

COST ITEM		SURFACE TYPE GRAVEL	BITUM. MIX	CONCRETE	MISC. ITEMS
GRADING	MILES		115.326		
	COST		2,190,699		109.147
	COST/MILE		18,995		
DRAINAGE	MILES		96.892		
	COST		1,433,808		500,45
	COST/MILE		14,798		
FOUNDATION	MILES		105.612		
	COST		1,722,817		41,915
	COST/MILE		16,312		
SURFACING	MILES		117.664		
	COST		8,767,694		46,563
	COST/MILE		74,514		
RDSIDE DEVEL.	MILES		7.900		
	COST		63,331		
	COST/MILE		8,016		
EROSION CTL.	MILES		117.664		
	COST		359,423		307,274
	COST/MILE		3,054		
TRAFFIC CTL.	MILES		117.664		
	COST		1,274,484		438,966
	COST/MILE		10,831		
FENCING	MILES		43.961		
	COST		215,682		2,890
	COST/MILE		4,906		
MISC.	MILES		117.664		
	COST		857,460		99,466
	COST/MILE		7,287		
BRIDGES	SQ. FEET				
	COST				625,161
	COST/SQ. FOOT				
ALL ITEMS	MILES		117.664		
	COST		16,885,398		2,171,837
	COST/MILE		143,505		

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY BY SURFACE TYPE
DURING CALENDAR YEAR 1978
URBAN EXTENSION

TABLE 4B

OCTOBER 26, 1979

COST ITEM			SURFACE TYPE		MISC. ITEMS
		GRAVEL	BITUM. MIX	CONCRETE	
GRADING	MILES		2.100		
	COST		132,303		
	COST/MILE		63,001		
DRAINAGE	MILES		2.100		
	COST		241,729		
	COST/MILE		115,109		
FOUNDATION	MILES		2.100		
	COST		152,488		
	COST/MILE		72,613		
SURFACING	MILES		2.100		
	COST		512,017		
	COST/MILE		243,817		
RDSIDE DEVEL.	MILES		2.100		
	COST		185,275		
	COST/MILE		88,226		
EROSION CTL.	MILES		.700		
	COST		2,200		
	COST/MILE		3,142		
TRAFFIC CTL.	MILES		2.100		
	COST		328,863		316,083
	COST/MILE		156,601		
MISC.	MILES		2.100		
	COST		54,000		9,024
	COST/MILE		25,714		
BRIDGES	SQ. FEET				
	COST				
	COST/SQ. FOOT				
ALL ITEMS	MILES		2.100		
	COST		1,608,875		325,107
	COST/MILE		766,130		

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY BY SURFACE TYPE
DURING CALENDAR YEAR 1978
SECONDARY SYSTEM

TABLE 4C

OCTOBER 26, 1979

COST ITEM		SURFACE TYPE GRAVEL	BITUM. MIX	CONCRETE	MISC. ITEMS
GRADING	MILES		26.704	.762	
	COST		2,246,649	416,764	27,341
	COST/MILE		84,131	546,934	
DRAINAGE	MILES		26.704	.762	
	COST		549,952	154,518	3,684
	COST/MILE		20,594	202,779	
FOUNDATION	MILES		26.704	.762	
	COST		789,536	84,174	1,170
	COST/MILE		29,566	110,464	
SURFACING	MILES		26.704	.762	
	COST		1,631,940	218,181	1,750
	COST/MILE		61,112	286,326	
RDSIDE DEVEL.	MILES			.762	
	COST			20,075	
	COST/MILE			26,345	
EROSION CTL.	MILES		26.704	.762	
	COST		379,900	57,042	118,524
	COST/MILE		14,226	74,858	
TRAFFIC CTL.	MILES		26.704	.762	
	COST		305,874	186,572	217,706
	COST/MILE		11,454	244,845	
FENCING	MILES		26.704	.762	
	COST		270,102	7,422	1,904
	COST/MILE		10,114	9,740	
MISC.	MILES		26.704	.762	
	COST		333,400	76,500	42,823
	COST/MILE		12,485	100,393	
BRIDGES	SQ. FEET				
	COST				
	COST/SQ. FOOT				
ALL ITEMS	MILES		26.704	.762	
	COST		6,507,353	1,221,248	414,902
	COST/MILE		243,684	1,602,687	

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY BY SURFACE TYPE
DURING CALENDAR YEAR 1978

TABLE 4D
F.A. URBAN
OCTOBER 26, 1979

COST ITEM		SURFACE TYPE			MISC. ITEMS
		GRAVEL	BITUM. MIX	CONCRETE	
GRADING	MILES		.385	.251	
	COST		31,931	84,098	16,954
	COST/MILE		82,937	335,051	
DRAINAGE	MILES		.385	.251	
	COST		59,564	66,038	39,762
	COST/MILE		154,711	263,099	
FOUNDATION	MILES		.385	.251	
	COST		54,176	24,503	12,486
	COST/MILE		140,716	97,621	
SURFACING	MILES		.385	.251	
	COST		99,743	65,877	50,663
	COST/MILE		259,072	262,458	
RDSIDE DEVEL.	MILES		.385	.251	
	COST		17,930	8,679	18,878
	COST/MILE		46,571	34,577	
EROSION CTL.	MILES		.385	.251	
	COST		3,598	4,018	500
	COST/MILE		9,345	16,007	
TRAFFIC CTL.	MILES		.385	.251	
	COST		16,764	79,351	702,482
	COST/MILE		43,542	316,139	
FENCING	MILES			.251	
	COST		163	2,410	
	COST/MILE			9,601	
MISC.	MILES		.385	.251	
	COST		27,500	13,500	46,617
	COST/MILE		71,428	53,784	
BRIDGES	SQ. FEET				76,960
	COST				5,193,129
	COST/SQ. FOOT				67.478
ALL ITEMS	MILES		.385	.251	
	COST		311,369	348,474	6,081,471
	COST/MILE		808,750	1,388,342	

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY BY SURFACE TYPE
DURING CALENDAR YEAR 1978

TABLE 4E

OTHER

OCTOBER 26, 1979

COST ITEM		SURFACE TYPE			MISC.
		GRAVEL	BITUM. MIX	CONCRETE	ITEMS
GRADING	MILES				2.200
	COST	26,283			35,813
	COST/MILE				16,278
DRAINAGE	MILES				2.200
	COST	18,842			12,273
	COST/MILE				5,578
FOUNDATION	MILES				2.200
	COST	97,983			285
	COST/MILE				129
SURFACING	MILES				2.200
	COST	7,460			36,937
	COST/MILE				16,789
EROSION CTL.	MILES				2.200
	COST	875			16,248
	COST/MILE				7,385
TRAFFIC CTL.	MILES				2.200
	COST	23,429			30,363
	COST/MILE				13,801
FENCING	MILES				2.200
	COST	2,855			9,100
	COST/MILE				4,136
MISC.	MILES				2.200
	COST	5,000			17,630
	COST/MILE				8,013
BRIDGES	SQ. FEET				
	COST				
	COST/SQ. FOOT				
ALL ITEMS	MILES				2.200
	COST	182,727			158,649
	COST/MILE				72,113

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF ROADWAY MILEAGE AWARDED BY NUMBER OF TRAFFIC LANES DURING CALENDAR YEAR 1978

TABLE 5

OCTOBER 26, 1979

NO. LANES	MILES	COST	COST/MILE
INTERSTATE SYSTEM			
2	12.554	5,808,420	462,674
4	5.017	7,487,635	1,492,452
TOTAL	17.571	13,296,055	756,704
PRIMARY SYSTEM			
2	22.421	7,346,561	327,664
4	1.183	909,459	768,773
TOTAL	23.604	8,256,020	349,772
URBAN EXTENSION			
2	1.200	996,162	830,135
4	.200	197,427	987,135
TOTAL	1.400	1,193,589	852,563
SECONDARY SYSTEM			
2	27.466	7,728,601	281,387
4			
TOTAL	27.466	7,728,601	281,387
F. A. URBAN			
2	.636	551,031	866,400
4			
TOTAL	.636	551,031	866,400
ALL SYSTEMS			
2	64.277	22,430,775	348,970
4	6.400	8,594,521	1,342,893
TOTAL	70.677	31,025,296	438,973

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU
SUMMARY OF STRUCTURES BY TYPE
DURING CALENDAR YEAR 1978

TABLE 6 INTERSTATE SYSTEM OCTOBER 26, 1979

BRIDGE TYPE	CODE	NO. OF STRUCTURES	SQ. FT. STRUCTURES	TOTAL COST	COST / SQ. FOOT
TIMB. GIRD.	X001	1	1,040	53,782	51.713
CONC. SLAB	X220	3	16,416	584,174	35.585
COMP. S/C GIRD.	X071	1	35,547	2,591,329	72.898
CONC. PRESTR. GIRD.	X081	2	15,925	608,645	38.219
	X181	1	9,614	373,857	38.886
	X281	1	4,484	140,214	31.269
	X481	1	21,660	1,269,386	58.605
TOTALS: INCLUDES STAGE		10		5,621,387	
TOTALS: EXCLUDES STAGE		10	104,686	5,621,387	53.697
TOTAL BRIDGE STAGE					

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU
SUMMARY OF STRUCTURES BY TYPE
DURING CALENDAR YEAR 1978

TABLE 6A PRIMARY SYSTEM OCTOBER 26, 1979

BRIDGE TYPE	CODE	NO. OF STRUCTURES	SQ. FT. STRUCTURES	TOTAL COST	COST / SQ. FOOT
CONC. SLAB	X020	1	10,032	368,335	36.716
CONC. PRESTR. GIRD.	X081	1	4,785	256,826	53.673
TOTALS: INCLUDES STAGE		2		625,161	
TOTALS: EXCLUDES STAGE		2	14,817	625,161	42.192
TOTAL BRIDGE STAGE					

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU
SUMMARY OF STRUCTURES BY TYPE
DURING CALENDAR YEAR 1978

TABLE 6D F.A. URBAN SYSTEM OCTOBER 26, 1979

BRIDGE TYPE	CODE	NO. OF STRUCTURES	SQ. FT. STRUCTURES	TOTAL COST	COST / SQ. FOOT
CONC. PRESTR. GIRD.	X081	1	76,960	5,193,129	67.478
TOTALS: INCLUDES STAGE		1		5,193,129	
TOTALS: EXCLUDES STAGE		1	76,960	5,193,129	67.478
TOTAL BRIDGE STAGE					

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU
SUMMARY OF STRUCTURES BY TYPE
DURING CALENDAR YEAR 1978

TABLE 6E ALL SYSTEMS OCTOBER 26, 1979

BRIDGE TYPE	CODE	NO. OF STRUCTURES	SQ. FT. STRUCTURES	TOTAL COST	COST / SQ. FOOT
TIMB. GIRD.	X001	1	1,040	53,782	51.713
CONC. SLAB	X020	1	10,032	368,335	36.716
	X220	3	16,416	584,174	35.585
COMP. S/C GIRD.	X071	1	35,547	2,591,329	72.898
CONC. PRESTR. GIRD.	X081	4	97,670	6,058,600	62.031
	X181	1	9,614	373,857	38.886
	X281	1	4,484	140,214	31.269
	X481	1	21,660	1,269,386	58.605
TOTALS: INCLUDES STAGE		13		11,439,677	
TOTALS: EXCLUDES STAGE		13	196,463	11,439,677	58.228
TOTAL BRIDGE STAGE					

STATE OF MONTANA DEPARTMENT OF HIGHWAYS
PLANNING AND RESEARCH BUREAU

SUMMARY OF CONTRACTED AND NON-CONTRACTED COSTS BY SYSTEM DURING CALENDAR YEAR 1978

TABLE 7

OCTOBER 26, 1979

SYSTEM	CONTRACTED COST	NON CONTRACTED COST	TOTAL
INTERSTATE	$ 34,023,022	$ 5,103,411	$ 39,126,433
PRIMARY	$ 19,057,235	$ 2,858,555	$ 21,915,790
URBAN EXTENSION	$ 1,933,982	$ 273,474	$ 2,207,456
SECONDARY	$ 8,143,503	$ 1,221,563	$ 9,365,066
F.A. URBAN	$ 6,741,314	$ 1,011,183	$ 7,752,497
OTHER	$ 341,376	$ 47,763	$ 389,139
TOTAL	$ 70,240,432	$ 10,515,949	$ 80,756,381